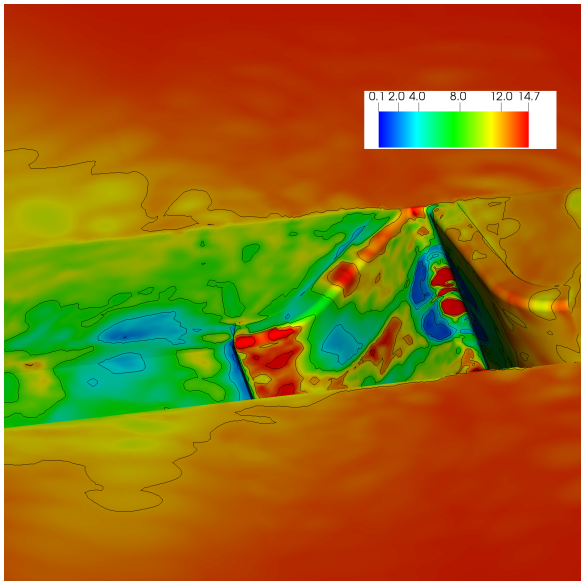
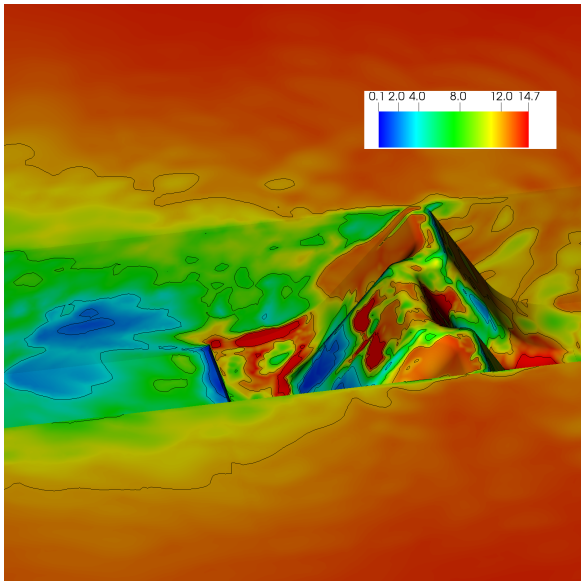
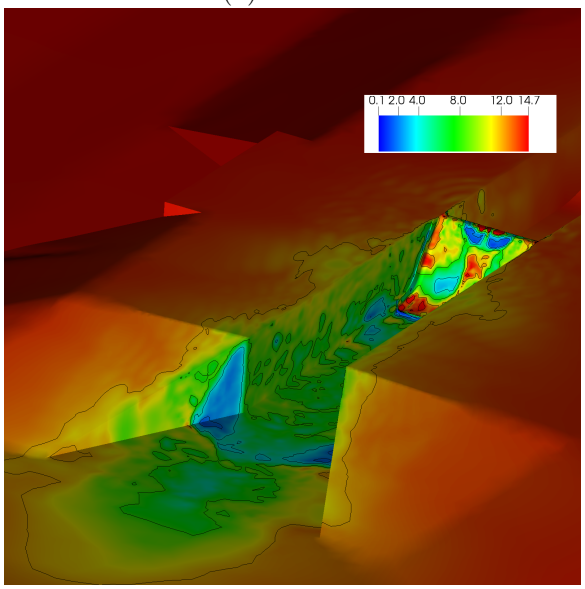
(a) STS-124 trench wall damage for reference.



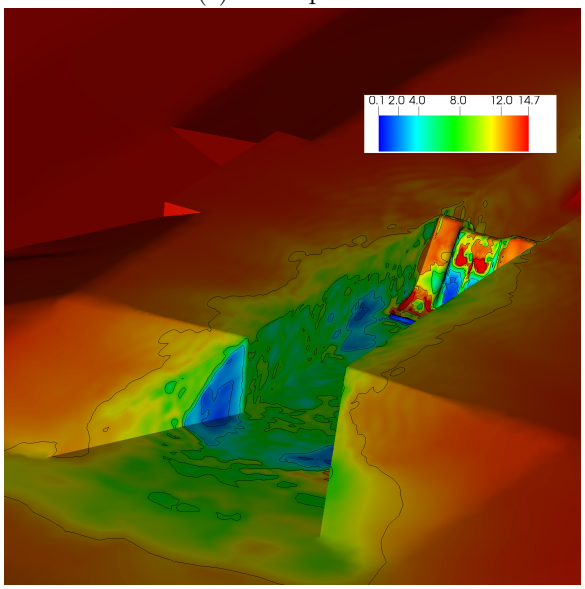
(b) Baseline



(c) Concept 1C2



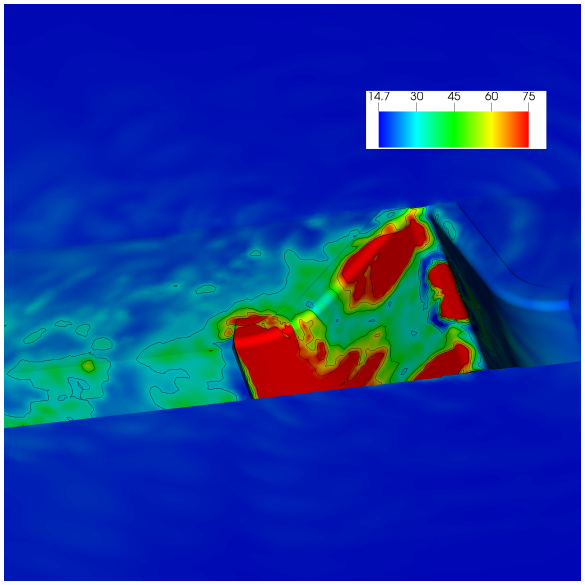
(d) Baseline



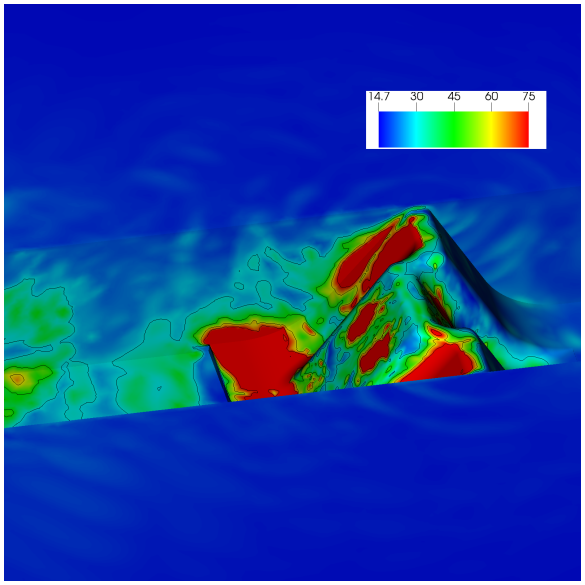
(e) Concept 1C2

Figure 41: Minimum surface pressure values over the time-interval $T_1 < t < T_2$, trench wall views. Note, that T_1 is equal to the time of the SRB ignition and $T_2 > T_{SS}$, where T_{SS} is the time where the rocket engines reach quasi-steady state conditions.

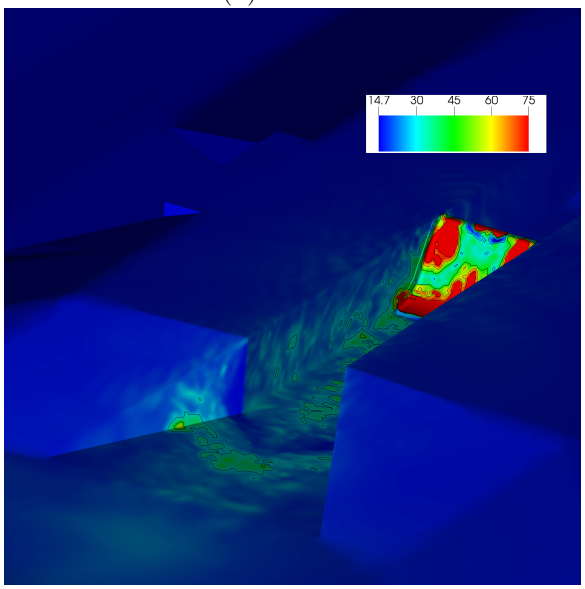
(a) STS-124 trench wall damage for reference.



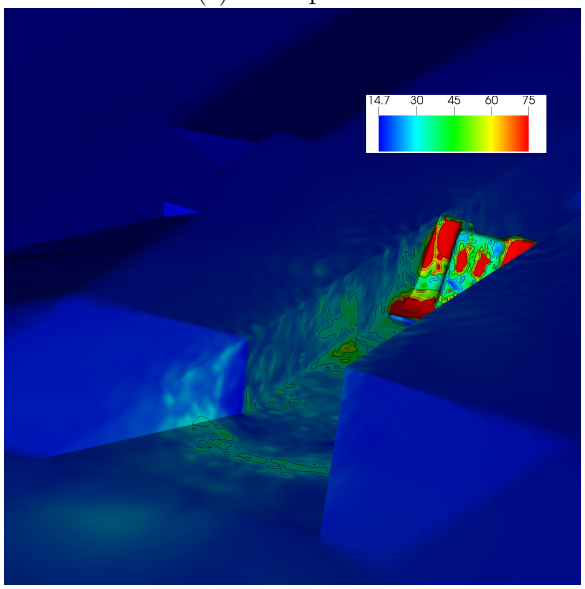
(b) Baseline



(c) Concept 1C2



(d) Baseline



(e) Concept 1C2

Figure 42: Maximum surface pressure values over the time-interval $T_1 < t < T_2$, trench wall views. Note, that T_1 is equal to the time of the SRB ignition and $T_2 > T_{SS}$, where T_{SS} is the time where the rocket engines reach quasi-steady state conditions.

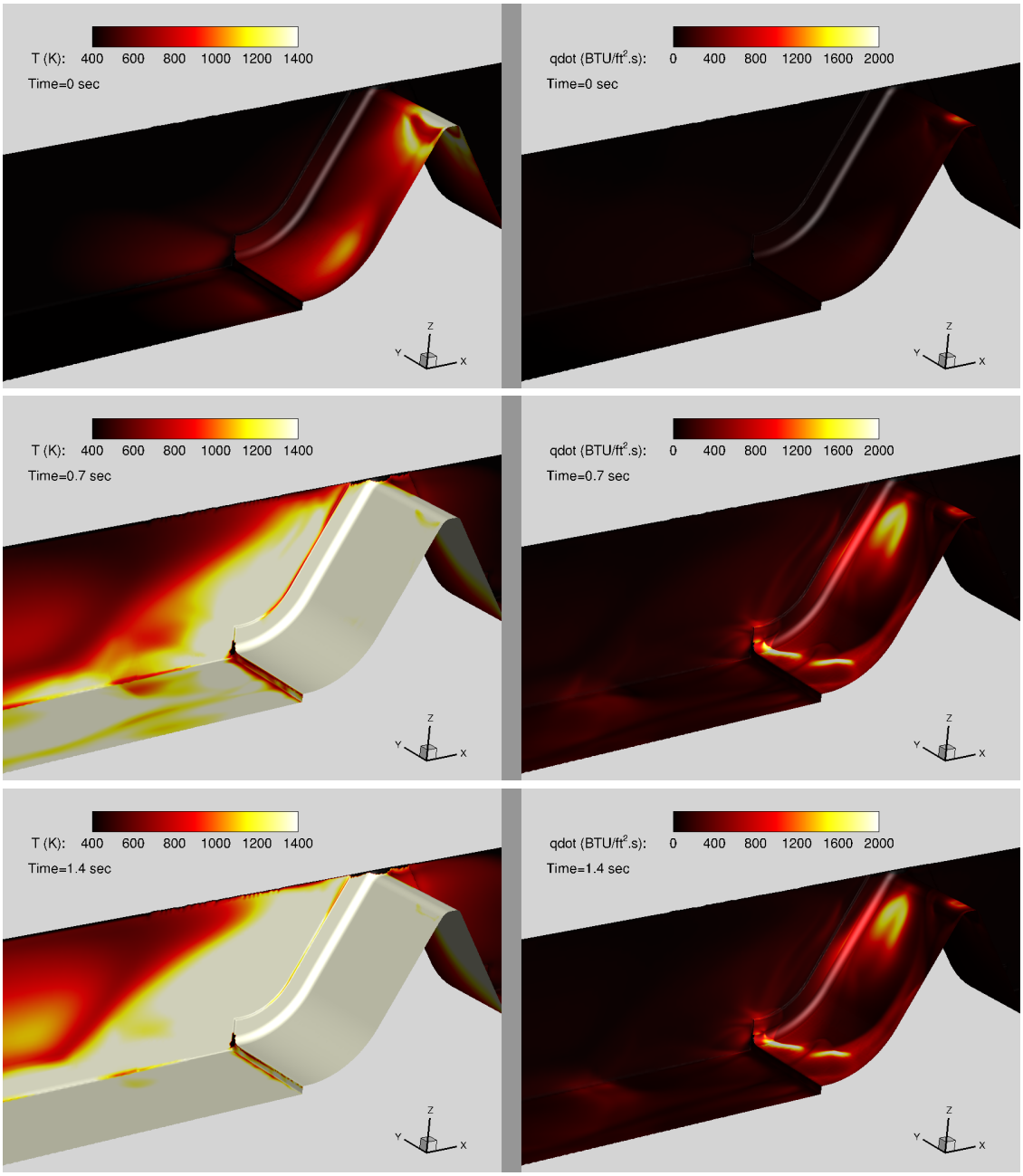


Figure 79: Instantaneous temperature (L) and heat flux (R) distributions for SLS-10001 vehicle on the trench wall of Baseline MFD.